

WE CLAIM:

1. A method for plating a conductive layer in an integrated circuit formed on a substrate, comprising:

immersing the substrate in a cleaning fluid; and

5 transferring the substrate from the cleaning fluid to a separate plating fluid while keeping the substrate immersed in fluid.

2. The method of Claim 1, wherein the cleaning fluid comprises a reducing agent.

3. The method of Claim 2, wherein the reducing agent etches oxide from
10 the conductive layer.

4. The method of Claim 3, wherein transferring the substrate comprises passing the substrate from the cleaning fluid directly to a second fluid.

5. The method of Claim 4, wherein transferring the substrate further comprises passing the substrate from the second fluid directly to the plating fluid.

15 6. The method of Claim 1, wherein the conductive layer comprises a patterned contact pad exposed through a window in a surrounding insulating layer.

7. The method of Claim 6, wherein the contact pad comprises a bond pad for connecting the integrated circuit to outside circuits.

8. A method for electroless plating a conductive polymer on a metal surface
20 of a workpiece, comprising:

immersing the workpiece in a container holding a plurality of solutions, wherein each of said plurality of solutions is in contact with at least one other of said plurality of solutions, thereby allowing direct transfer of said workpiece between said plurality of solutions in said container;

25 exposing the metal surface to an oxide cleaning solution within the container;

preferentially forming a layer comprising a conducting monomer after exposing the metal surface to an oxide cleaning solution and prior to removing the workpiece from the container; and

30 polymerizing said conducting monomer layer.

9. The method of Claim 8, wherein said metal surface includes an aluminum oxide layer prior to immersing the workpiece.